

HYDROCOLLATOR PACKS

Dr. Aastha Mishra

Introduction:-

Hot packs are the packs which are immersed in an apparatus called hydrocollator. They provide superficial moist heat to the part where applied. They contain the substance which absorbs heat like silica or gel. They are stored in a thermostatically controlled water bath inside the equipment.

The temperature inside the hydrocollator ranges between 65–80°C.

The aim of the hydrocollator pack is to rise the body temperature at 40–45°C.

Hydrocollator packs are available in various sizes and shapes . The size and shape of pack should be chosen on the basis of area being treated. The common sizes are small (for smaller joints like elbow, ankle), large (for large joints like hip and back), contoured (for cervical spine).

When used, hydrocollator packs are taken out of apparatus by means of tongs and wrapped inside a towel. Six to eight layers of towel is made around the pack. The total treatment time is around 8-10 minutes.

Physiological Effects and Indications:-

1. Effect on muscular spasm: The most important physiological effect of hot pack is that it relieves the muscular spasm very quickly. Moist heat provided by the hydrocollator pack is beneficial for relieving the muscular spasm.

2. Local rise in temperature: The rise in local body temperature occurs following hot packs application. The heat is transferred by means of conduction from hot packs to skin and superficial tissues. Local rise in temperature has many effects including increasing circulation, relieving spasm and thus relieving pain.

3. Increase of local circulation: The local circulation around the area is also increased. It provides fresh supply of blood and nutrition. It reduces the waste products of metabolism from the area.

4. Skin and connective tissue: Skin becomes supple and elasticity of connective tissue is also increased when combined with stretching.

5. Relieve of pain: Pain is relieved by application of hot packs. Pain relief following hot pack application may occur due to decreased nerve conduction velocity or elevated pain threshold. It may be due to sedative or counter irritation effect by heat.

Pain relieve may be associated with relieve of muscular spasm and increase in joint range of motion.

Contraindications

The hot packs should not be used in the area of:

- i. Impaired skin sensation
- ii. Open wounds
- iii. Recent hemorrhage
- iv. Skin allergy
- v. Impaired circulation

—————